Owner's Manual

SETTING UP INSTRUCTIONS
PARTS LIST

McCORMICK

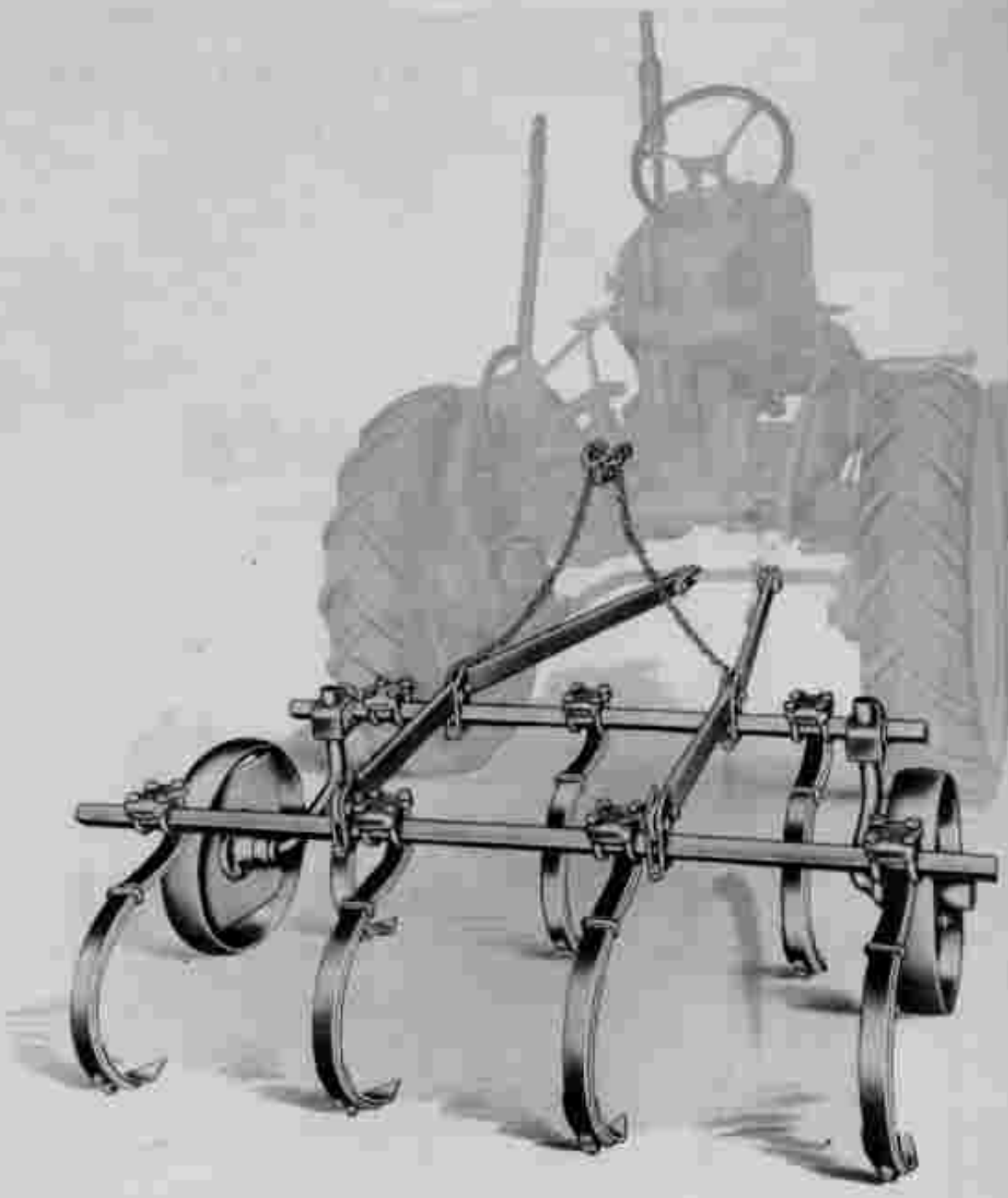
(Also McCormick-Deering)

Cub-3

Spring Tooth Field Cultivator

INTERNATIONAL HARVESTER COMPANY

180 North Michigan Ave. Chicago 1, Illinois, U.S.A.



Cub-3 Spring Tooth Field Cultivator.

TO THE OWNER

This cultivator consists of two frame rails, two 1-1/4" square tool bars, one long and one short, seven spring teeth with shovels and two steel tire gauge wheels. Pneumatic tire gauge wheels are available on special order.

The cultivator is pulled by means of the tractor drawbar which is extended forward. The frame rails are attached to the tractor drawbar to which the square tool bars are clamped parallel and behind the rear tractor wheels. The spring teeth are clamped on the tool bars. The gauge wheels control the operating depth.

This cultivator requires a master control lever (hand lift) which you may already have for use with some other implement. Because it is used with other implements, it is furnished only on special order.

You are urged to consult your International Harvester dealer concerning unusual field conditions or special crops. Within the International Harvester Company are men who have spent years in research and study of these things. Let the experience of these men serve you.

Be sure to read the instructions for Adjusting and Operating in this manual. Check each item referred to and acquaint yourself with the adjustments required to do a good job and to get maximum trouble-free service from your machine.

INSTRUCTIONS FOR ADJUSTING AND OPERATING

LUBRICATION

Keep all bearings and moving parts well lubricated.

GENERAL

It is recommended that the rear tractor wheels be equipped with either 7-24" or 8-24" pneumatic tires for maximum traction and ground clearance when the cultivator is in the raised position; however, 6-24" tires can be used.

This cultivator can be used with tractors equipped with fixed front axles; however, in view of the fact that various implements (not covered herein) are not adaptable to tractors with these axles, it is recommended the tractor be equipped with the adjustable type.

SPRING TOOTH SPACINGS

Spacings of 6, 7, 8 and 9" can be obtained between the spring tooth shovels. The frame rails can be adjusted along the tool bars, when necessary, to locate the spring tooth clamps.

MASTER CONTROL LEVER

CAUTION! Whenever the implement is removed from the tractor, the master control lever must always be set in the FORWARD notch in the quadrant. If another implement is not to be attached, the tension of the counter-balancing spring should be relieved.

INSTRUCTIONS FOR SETTING UP

Remove all wires and arrange parts conveniently.

Lubricate all bearings and moving parts as you proceed and see that they work freely.

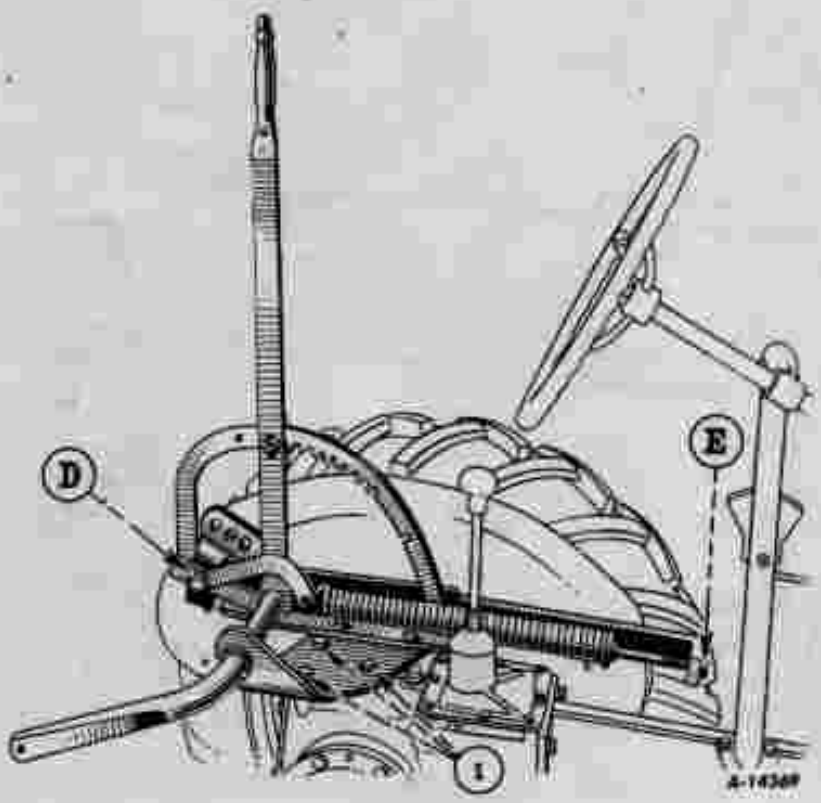
Bolts must be used in the holes in which they are found, or in parts to which they are attached, unless otherwise shown.

Shaded portions in the illustrations show parts to be assembled: these must be placed on the machine in the order numbered.

Wherever the terms "right" and "left" are used, it should be understood to mean from a position behind and facing the machine.

We reserve the right to make changes or improvements in the design or construction of any part without incurring the obligation to install such changes on any machine previously delivered.

MASTER CONTROL LEVER (511 893 R93)

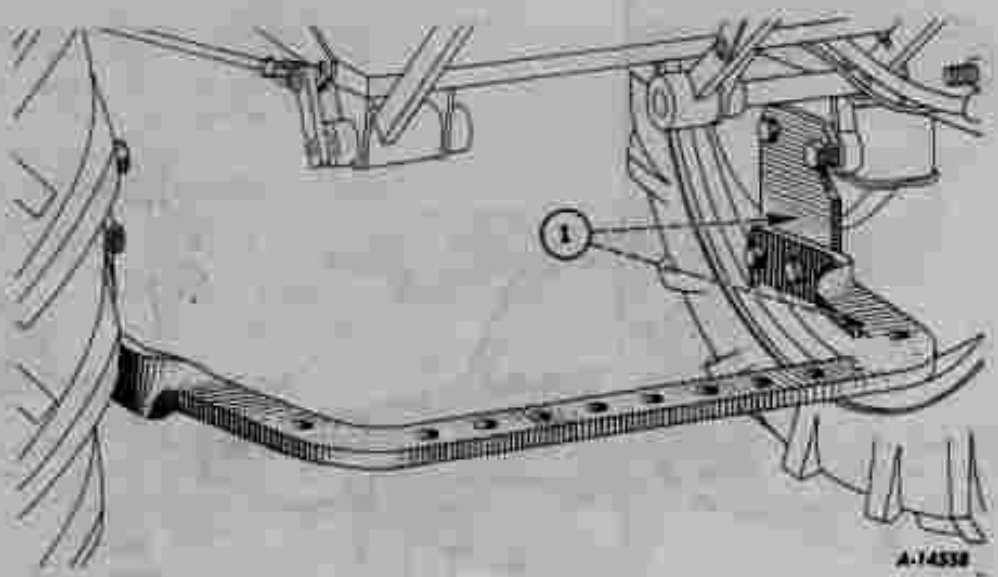


Illust. 1

1. Bolt the lever unit to the transmission case with three cap screws.

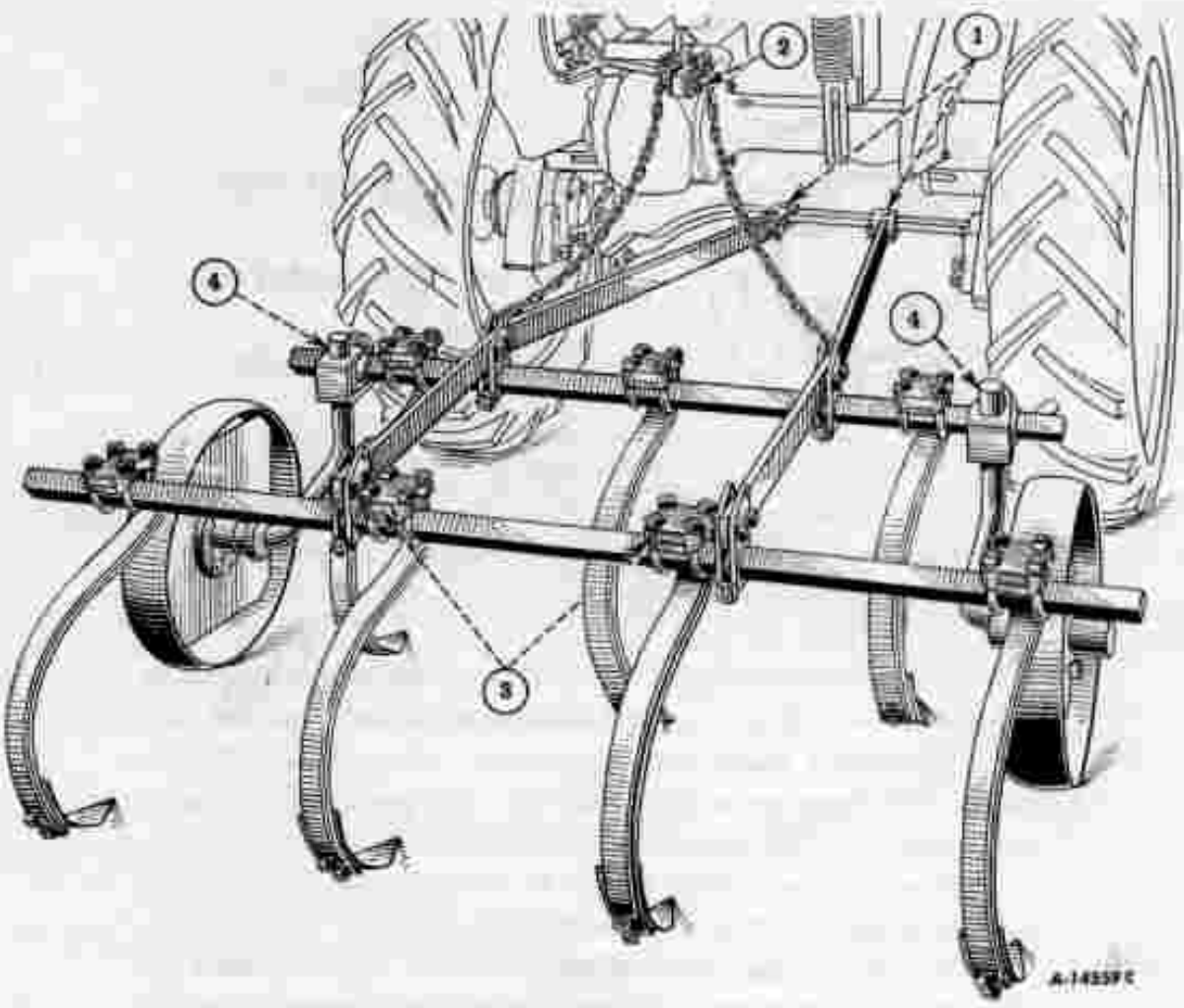
For greater ease in lifting the cultivator out of the ground, set the bolt "D" in the top of the slot in lift arm.

Balance the weight of the cultivator as desired by adjusting the spring tension at "E".



Illust. 2

1. Remove the tractor drawbar from the rear of the tractor and attach it to the front pads on the tractor rear wheel housing as shown.



Illust. 3

1. Place the cultivator frame under the tractor and attach it to the tractor drawbar with clevises and drilled pins. Secure the pins with quick-attachable cotters.

2. Connect the pickup chains with the chain clips to the rockshaft.

3. Lift the cultivator frame and set the spring teeth where desired.

4. Attach the gauge wheels as shown.

NOTE: Pneumatic tire gauge wheels are furnished only on special order. Steel tire gauge wheels are regular.

Farm Accidents can be prevented with your help

No accident-prevention program can be successful without the whole-hearted co-operation of the person who is directly responsible for the operation of equipment.

To read accident reports from all over the country is to be convinced that a large number of accidents can be prevented only by the operator anticipating the result before the accident is caused and doing something about it. No power-driven equipment, whether it be transportation or processing, whether it be on the highway, in the harvest field or in the industrial plant, can be safer than the man who is at the controls. If farm accidents are to be prevented—and they can be prevented—it will be done by the operators who accept a full measure of their responsibility.

It is true that the designer, the manufacturer, the safety engineer can help; and they will help, but their combined efforts can be wiped out by a single careless act of the operator.

It is said that ***"the best kind of a safety device is a careful operator."*** We ask you to be that kind of an operator.

PARTS LIST AND ILLUSTRATIONS

The following pages contain parts lists and "exploded" view illustrations of the various units disassembled so that parts wanted may be readily located. Reference numbers only are shown in the illustrations. To avoid errors and delays, when ordering parts always use the regular "Part Number" shown with the Ref. No. Do not use reference numbers when ordering parts.

WHEN THE PART NUMBER IS NOT KNOWN: Use the "Index to Units" below and refer to the illustration of the unit on which the part is used. The illustrations show reference numbers which appear in the accompanying reference list. The reference list contains the part number with a "noun first" or basic description.

WHEN THE PART NUMBER IS KNOWN: Use the numerical index at the back of the manual. This index shows the page number on which the part is listed. The reference number, which is listed with the part number, may be used for referring to the illustration.

Do not order from the illustrations only; refer to the list also.

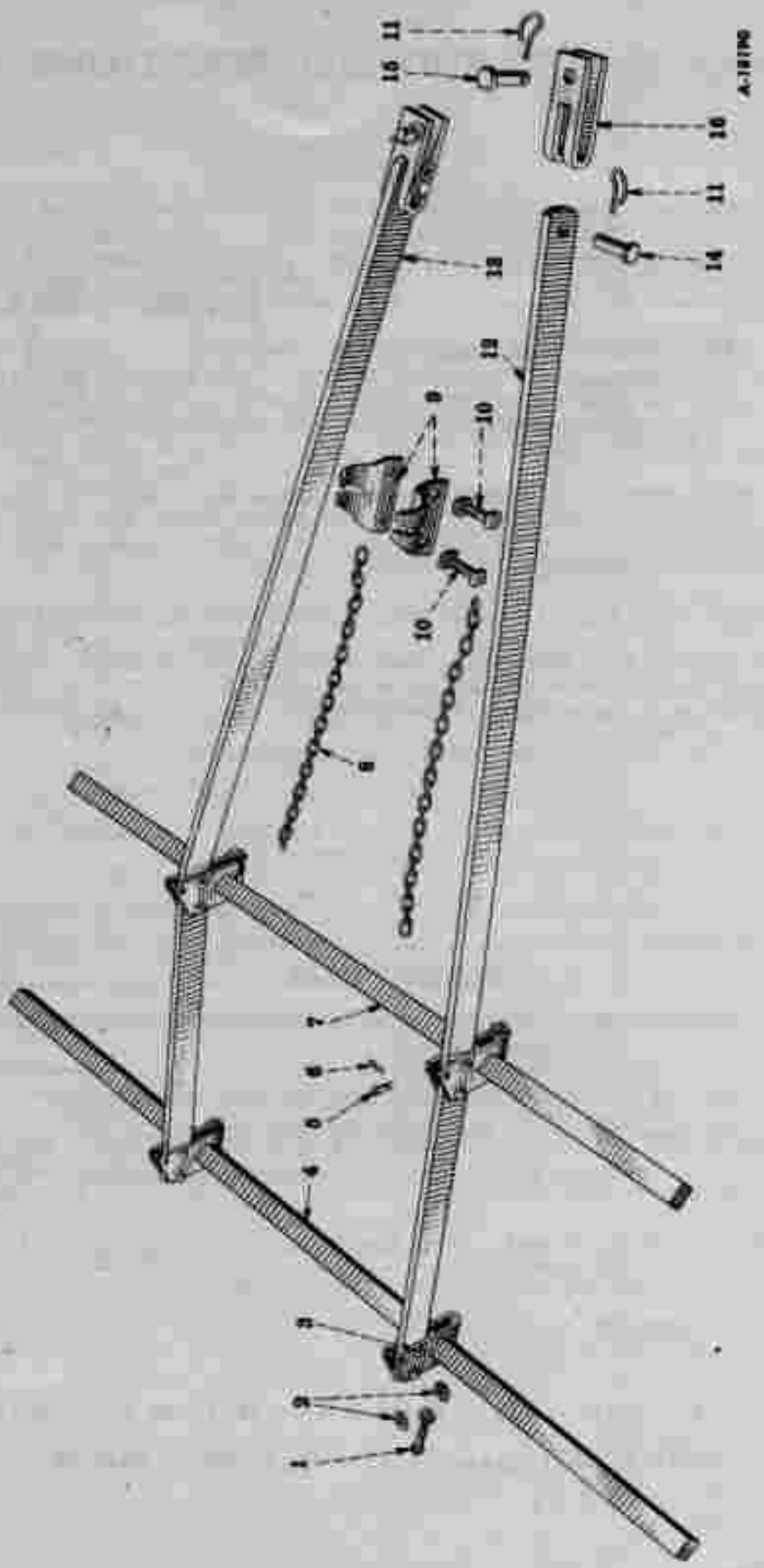
Attaching parts, such as bolts, cap screws, lock washers, nuts, cotter pins, etc. are listed beneath and indented from the part they attach. Attaching parts must be ordered separately as they are not furnished with the part they attach.

INDEX TO UNITS

Numerical Index to Part Numbers will be found on page 16.

List of abbreviations will be found on page 16.

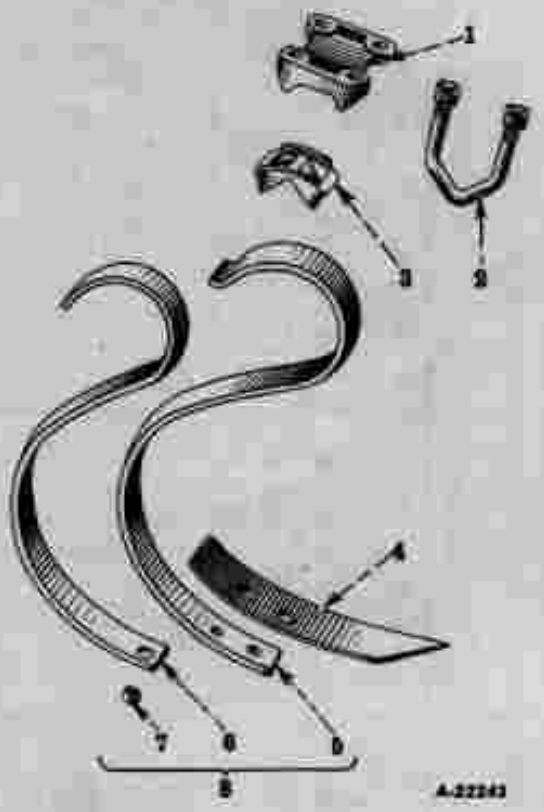
FRAME



Index to Reference Numbers shown in illustration on opposite page.

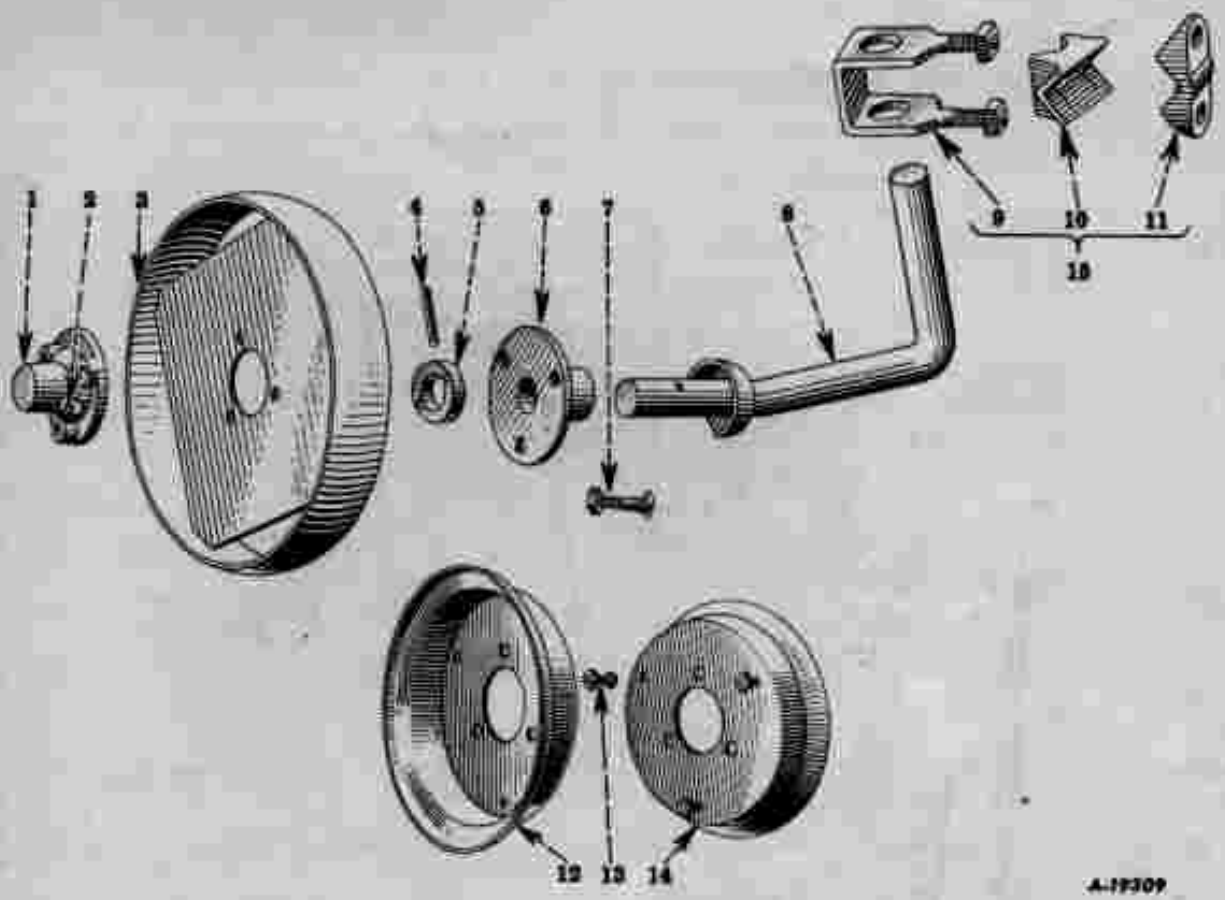
Ref. No.		Part Number	Description	Ref. No.	Part Number	Description
1		13 415 R11	Follows Ref. No. 3.	9	513 988 R2	BRACKET, lifting chain.
2	W	6 652	Follows Ref. No. 3.	10	13 338 R11	BOLT, machine, 1/2-13NC x 2", w/NUT (2 used).
3		511 934 R1	CLAMP, tool bar.	11	PO 18 500 A	PIN, quick-attachable cotter.
		13 415 R11	BOLT, machine, 7/16-14NC x 3", w/NUT.		103 323	WASHER, lock, 1/2" (2 used).
		110 437	RIVET, rd-hd., 7/16 x 1-1/2" (2 used).	12	511 932 R1	RAIL, frame, right.
		6 652	WASHER, plain, 15/32" I.D. x 1" O.D. x 16 ga. (2 used).	13	511 933 R1	RAIL, frame, left.
				14	6 642	Follows Ref. No. 16.
4		29 416 B	TOOLBAR (1-1/4" sq. x 60").	15	26 209 B	Follows Ref. No. 16.
5	Q	1 179	Follows Ref. No. 8.	16	511 935 R1	CLEVIS.
6		13 068 R1	Follows Ref. No. 8.		PO 18 500 A	PIN, quick-attachable cotter.
7		511 937 R1	TOOLBAR (1-1/4" sq. x 48").		26 209 B	PIN, std-hd., 5/8 x 1-13/16".
8	B	82 157	CHAIN, lifting (26 links of 1/4" Proof coil chain).		6 642	PIN, std-hd., 5/8 x 2-1/4".
		13 068 R1	PIN, cotter, 3/16 x 1"		10 620 F	WASHER, plain, 21/32" I.D. x 1-1/2" O.D. x 16 ga.
	Q	1 179	PIN, std-hd., 5/16 x 1-1/4".			

SPRING TOOTH



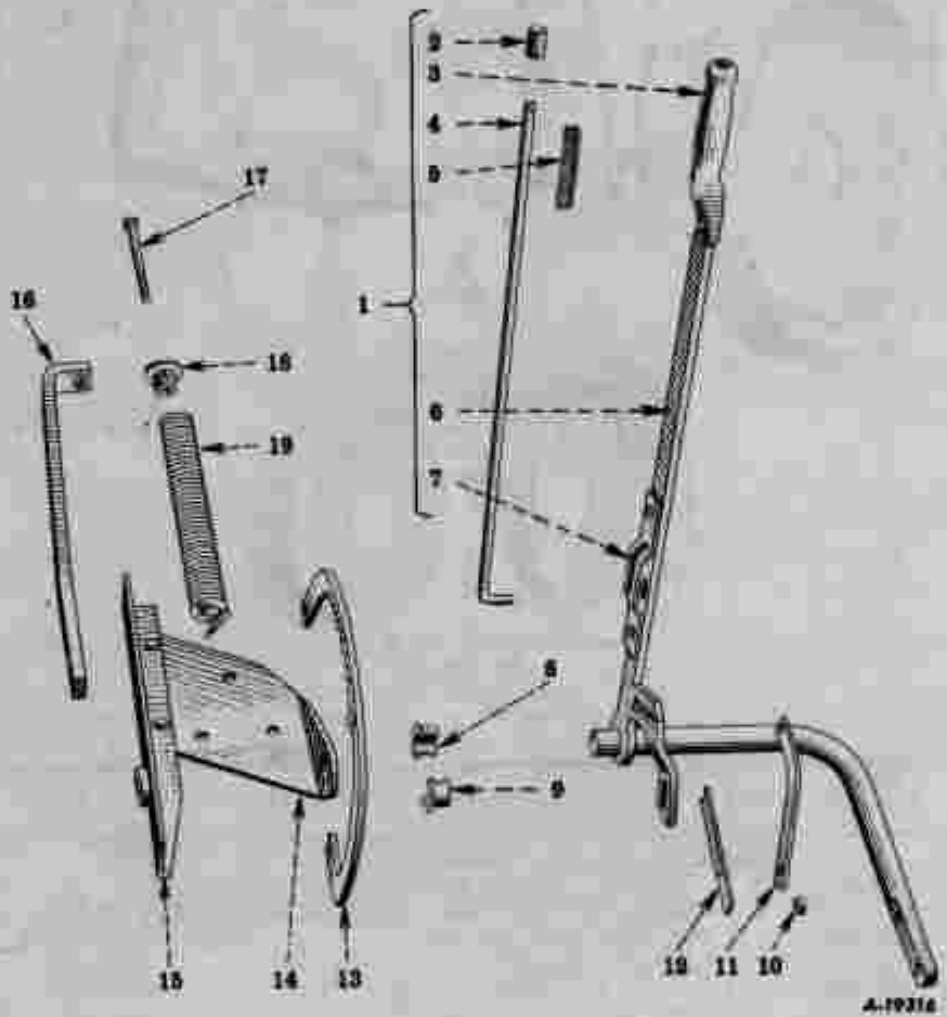
Ref. No.	Part Number	Description
1	PO 3 140	CAP, U-bolt.
2	PO 27 762 A	U-BOLT, spring tooth, w/NUTS.
	105 608	NUT, square, 1/2-13NC (2 used.)
	103 323	WASHER, lock, 1/2" (2 used).
3	PO 3 139	BLOCK, clamp.
4	P 16 280½	SHOVEL.
	15 569 R11	BOLT, plow, No.3, 7/16-14NC x 1-1/4",w/NUT.
	15 586 R11	BOLT, plow, No.3, 7/16-14NC x 1-1/2",w/NUT.
	103 322	WASHER, lock, 7/16" (2 used).
	Q 109	WASHER, plain, 1/2" I.D. x 1-1/8" O.D. x 16 ga.
5	P 16 691	TOOTH, spring.
6	P 16 692	HELPER, tooth.
7	S 5 375	BUSHING, tooth helper.
8	P 16 705	TOOTH, spring, assembly (Consists of: 1 BUSHING S 5 375; 1 HELPER P 16 692; 1 TOOTH P 16 691).

POGW-137 GAUGE WHEEL, Left (Steel Tire) (Regular)
POGW-138 GAUGE WHEEL, Right (Steel Tire) (Regular)
POGW-139 GAUGE WHEEL, Left (Pneumatic Tire) (Special)
POGW-140 GAUGE WHEEL, Right (Pneumatic Tire) (Special)



Ref. No	Part Number		Description
1.	PO 2 773		BOX, wheel, outside.
2	119 512		FITTING, lubrication, straight, 1/8".
3	PO 24 429		WHEEL, steel tire, (welded assembly).
4	PO 25 932		FOLLOWS Ref. No 5.
5	PO 2 953		COLLAR, thrust.
	PO 25 932		PIN, thrust collar.
6	PO 2 774		BOX, wheel, inside.
7	15 091	R11	BOLT, carriage, 1/2-13 NC x 2-1/4", w/NUT
	103 323		WASHER, lock, 1/2".
8	{ 511 939	R11	AXLE, left, w/COLLAR (welded assembly).
	{ 511 940	R11	AXLE, right, w/COLLAR (welded assembly).
9	512 837	R11	U-BOLT, axle, w/NUTS
	105 610		NUT, square, 5/8-11NC (2 used).
10	PO 3 190		BLOCK, U-bolt.
11	28 256	B	CAP, U-bolt.
12	B 32 992		WHEEL, disk, w/VALVE HOLE.
13	13 245	R11	BOLT, machine, 3/8-16NC x 3/4" w/NUT (3 used).
	103 321		WASHER, lock 3/8" (3 used).
14	B 32 868		WHEEL, disk, w/o VALVE HOLE.
15	514 769	R91	CLAMP, axle, assembly.

MASTER CONTROL LEVER (511 893 R93)



MASTER CONTROL LEVER (511 893 R93) - Continued

Index to Reference Numbers shown in illustration on opposite page.

Ref. No.	Part Number	Description
1	511 970 R93	LEVER and ROCKSHAFT, assembly.
2	511 964 R1	BUTTON, push, lever.
	142 485	Pin, groove, 1/8 x 5/8".
3	511 962 R1	HANDLE, lever.
	104 182	RIVET, ck-hd.,5/16" x 7/8".
	C 153 M	WASHER, plain,7/16" I.D. x 11/16" O.D. x 18 ga.
4	511 963 R1	ROD, latching, lever.
	13 042 R1	PIN, cotter, 1/8 x 3/4".
	106 263	WASHER, plain, 7/16" I.D. x 1" O.D. x 14 ga.
5	2 087 A	SPRING, latch rod (41/64" O.D. x 3-3/8" long) (20 coils).
6	514 298 R92	ROCKSHAFT and LEVER (welded assembly).
	13 139 R1	PIN, cotter, 1/4 x 1-3/4".
	Q 166	WASHER, plain, 1-5/16"I.D.x 2" O.D. x 18 ga.
7	514 297 R1	GUIDE, latching rod.
	104 099	RIVET, ck-hd., 5/16 x 1" (2 used).
8	1 691 B	BEARING, half, rockshaft, upper.
9	1 692 B	BEARING, half, rockshaft, lower.
10	27 485 B	BUSHING, spring link.
11	511 976 R1	LINK, spring.
	13 293 R11	BOLT, machine, 1/2-13NC x 1-1/2", w/NUT.
	PO 10 535	WASHER, plain, 17/32" I.D. x 1-1/4" O.D. x 11 ga. (2 used).
12	511 975 R1	ADJUSTER, spring link.
13	511 973 R2	QUADRANT, lever.
	13 271 R11	BOLT, machine, 7/16-14NC x 1-1/4", w/NUT.
	13 316 R11	BOLT, machine, 7/16-14NC x 1-3/4", w/NUT.
	103 322	WASHER, lock, 7/16" (2 used).
14	515 742 R1	PLATE, mounting, rockshaft.
	179 883	SCREW, cap, 1/2-13NC x 1-1/4" (3 used).
	103 323	WASHER, lock, 1/2" (2 used).
15	515 743 R1	SUPPORT, quadrant (also rockshaft support).
	114 774	NUT, hex., 1/2-13NC (4 used).
	15 025 R11	BOLT, carriage, 1/2-13NC x 1-1/4", w/NUT. (2 used).
16	511 974 R1	ANCHOR, spring, front.
	13 292 R11	BOLT, machine, 7/16-14NC x 1-1/2", w/NUT.
	103 322	WASHER, lock, 7/16".
17	Q 882	BOLT, machine, 1/2-13NC x 6" (w/5-1/8" of thread).
	PO 10 535	WASHER, plain, 17/32" I.D. x 1-1/4" O.D. x 11 ga.
18	M 1 425	PLUG, spring.
19	M 1 430	SPRING, balance (1-11/16" O.D. x 14-5/16" long (38 coils).

NUMERICAL INDEX

ABBREVIATIONS USED IN THIS MANUAL

ga. . . . . .gauge	sq. . . . . square
I.D. . . . . .inside diameter	std-hd. . . . . .standard head
lgth. . . . . length	w/ . . . . . with
NC. . . . . National Coarse Thread	w/o . . . . . .without
O.D. . . . . outside diameter	

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